

REMARKS

Claims 1-20 are pending in the present application. Claims 4-6, 12, 13, 15 and 16 have been amended. The specification has been amended to include a new abstract that meets the maximum word length requirement.

The Examiner has indicated that claims 9 and 16 would be allowable if rewritten to include all of the limitations of the claims from which they depend.

Applicants respectfully request reconsideration of the application in view of the foregoing amendments and the remarks appearing below.

Objection to Declaration

The Examiner has objected to the oath as containing an un-initialed alteration and two undated alterations.

The undersigned attorney has been attempting to have a new declaration executed by the inventors that did not initial and/or date the original declaration, and will submit a new declaration as soon as possible. As a result of a telephone conversation between the Examiner and Ms. Karen Jeffer of the below listed law firm on January 3, 2006, the undersigned attorney believes that the Examiner will not consider the present Response to be non-responsive for lacking the new declaration. Again, a newly executed declaration will be submitted as soon as possible.

Objection to Specification

The Examiner has objected to the specification on the basis that the abstract exceeds 150 words.

Applicants have replaced the original abstract with an abstract containing fewer than 150 words. Therefore, Applicants respectfully request that the Examiner withdraw the present objection.

Objection to Claims

The Examiner has objected to claims 2-9, 11-17, 19 and 20 as containing various informalities.

Regarding claims 4 and 12, the Examiner states that these claims are unclear. Applicants have amended these claims and believe their meaning is clear.

Regarding claims 5 and 13, the Examiner suggests that the word "alternatingly" appearing in these claims should be replaced with the word "alternatively." Applicants respectfully disagree.

"Alternatingly" is an adverb commonly used in patent practice to mean either: 1) following of each other and taking of each other's place in a regular pattern or 2) shifting back and forth, especially regularly or constantly, between one state and another. Applicants have used the term "alternatingly" in accordance with its first meaning above. Use of the term "alternatingly" by others is demonstrated by searches using the YAHOO!® and GOOGLE® general Internet search engines, each of which returned more than 70,000 hits. The term "alternatively" means "otherwise" or "in place of" and is not appropriate for these claims.

Regarding claims 6 and 16, the Examiner suggests that "are" in line 2 of each of these claims be changed to "is" to correspond to the singular word "plurality." Applicants have made the suggested substitution.

Regarding claim 15, the Examiner indicates that the dependency of this claim needs to be clarified. Applicants have amended claim 15 to depend from claim 14.

Regarding claims 2-9, 11-17, 19 and 20, the Examiner indicates generally that these claims have insufficient antecedent basis issues.

Applicants have reviewed claims 2-9, 11-17 19 and 20 in detail and have not found any clear antecedent basis issues. If the Examiner has any specific objections, Applicants respectfully request that the Examiner explicitly state such objections in the next Office Action.

For at least the foregoing reasons, Applicants respectfully request that the Examiner withdraw the present objections.

Rejection Under 35 U.S.C. § 102

The Examiner has rejected claims 1-8, 10-15 and 17-20 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,404,026 to Tsuyuki, stating that Tsuyuki discloses all of the limitations of these claims. Applicants have reviewed the Tsuyuki patent in detail and respectfully submit that the rejection is improper.

Tsuyuki discloses a semiconductor device that includes a substrate having a high-breakdown-voltage transistor region. Referring to FIG. 2, the high-breakdown-voltage transistor region includes square ring-shaped fixed potential wires 18a, 18b that are electrically connected to contact regions 40a, 40b, respectively, by corresponding contact sections 42a, 42b. The high-

breakdown-voltage transistor region also includes metal wiring 19a, 19b electrically connected to drains D1, D2, respectively, and metal wiring 20a, 20b (FIG. 3) electrically connected to sources S1, S2, respectively. Fixed potential wires 18a, 18b do not electrically connect contact regions 40a, 40b to either wiring 19a, 19b or wiring 20a, 20b. See, e.g., col. 10, line 49 to col. 11, line 25.

Each of independent claims 1, 10 and 18 includes a contact layer having a plurality of contacts for electrically connecting the integrated circuit to packaging. In the Office Action, the Examiner takes the position that the doped contact regions 40a, 40b correspond to contacts of these claims. Applicants respectfully disagree.

For example, claims 1 and 10 explicitly recite that the plurality of contacts are “for electrically connecting the integrated circuit to packaging.” Lest the examiner consider this quoted language to be inappropriate functional language, Applicants respectfully note that there is nothing inherently wrong with expressing structural limitations using functional language, as long as those skilled in the art would fairly understand its intended meaning. See, MPEP § 2173.05(g). In the present case, Applicants submit that those skilled in the art would readily understand that contacts that electrically connect the integrated circuit to packaging are external contacts (relative to the integrated circuit chip), that are much different from the deeply embedded doped-region type contacts disclosed by Tsuyuki. Since those skilled in the art would clearly understand the limitation based on the functional language, the contact limitation is proper.

Since the deeply embedded contacts described by Tsuyuki are much different from the external packaging contacts of the claims, Tsuyuki fails to disclose or even suggest the contacts of independent claims 1, 10 and 18. *A fortiori*, Tsuyuki does not disclose or suggest the claim limitation that requires a wiring layer to have wires that electrically connect packaging contacts with a power grid.

In addition and in this connection, even if contact regions 40a, 40b were to correspond to the contacts of independent claims 1, 10 and 18, which they do not, in order to satisfy the limitation of these claims that the plurality of wires in the wiring layer electrically connect the contacts with the power grid, fixed potential wires 18a, 18b would have to electrically connect contact regions 40a, 40b to a power grid. Even assuming that wires 19a, 19b, 20a, 20b make up a power grid, this simply is not the case. Rather, fixed potential wires 18a, 18b are connected

only to contact regions 40a, 40b, but not any of wires 19a, 19b, 20a, 20b. Wires 19a, 19b, 20a, 20b are connected to drains D1, D2 and sources S1, S2. Therefore, Tsuyuki fails to disclose or suggest this connectivity limitation of independent claims 1, 10 and 18.

In addition to these limitations of claims 1-20 being missing from the Tsuyuki patent, Tsuyuki fails to disclose a number of limitations of dependent claims 2-8, 10-15, 17, 19 and 20. For example, regarding dependent claims 4, 6, 12 and 20, each of these claims requires that wires in wiring layer be configured in concentric rings. Tsuyuki does not disclose or suggest this configuration. In rejecting these claims, the Examiner refers Applicants to col. 9, lines 50-57. However, at this location Tsuyuki discloses only that other shapes are possible, but is completely silent on a concentric ring configuration. Indeed, given their function, it appears that wires 18a, 18b could not be located concentrically with one another.

Regarding dependent claims 5 and 13, Tsuyuki fails to disclose or even suggest the interdigitated arrangement of contacts and wires of these claims. Therefore, the Tsuyuki patent cannot anticipate these claims.

For at least the foregoing reasons, Applicants respectfully submit that the present rejection is improper and respectfully request that the Examiner withdraw the rejection.

CONCLUSION

In view of the foregoing, Applicants submit that claims 1-20, as amended, are in condition for allowance. Therefore, prompt issuance of a Notice of Allowance is respectfully solicited. If any issues remain, the Examiner is encouraged to call the undersigned attorney at the number listed below.

Respectfully submitted,

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BTV.463467.1